



# Electronic signs since

## Analogue Bar MPS-BD50

1ch Analogue Industrial Bar Display



	Customized unit.			
Note	es for customized	unit:		

## **SPECIFICATIONS**

## **Display:**

Red LEDs. 300mm bar / 50 steps.

## **Analogue Inputs:**

1ch 10bits AD. 4-20mA. (0-20mA or 0-10V optional) 0-4mA = Bottom LED row is flashing indicating value below 4mA 4mA = Bottom LED row is lit up 20mA = All LED rows are lit up

## Reading distance (recommended)

1-30 meters.

## **Input filter:**

Very quick software filter is applied as default.

Slower filter is configruable when needed (10min, 5min, 1min, 30sec, 10sec, 1.5sec, 0.3sec)

## Unit decals:

Decal with units is free of charge when ordered. For example: (st, kg, ton, %, °C, pcs)

## Power supply:

12-24VAC Galvanic separated recommended. Microbus power supply provides necessary galvanic separation.

## **Working temperature:**

 $-30^{\circ}$ C  $-+55^{\circ}$ C. If starting up from minus degrees, please let the unit heat up 15min first before use. A restart can be necessary.

## IP-class:

IP54.

IP65 is achieved by sealing front cover.

## **Energy consumption:**

12W

## Weight:

2 kg

## Size BxHxD:

160 x 450 x 35 mm

## ArtNr:

See page 4

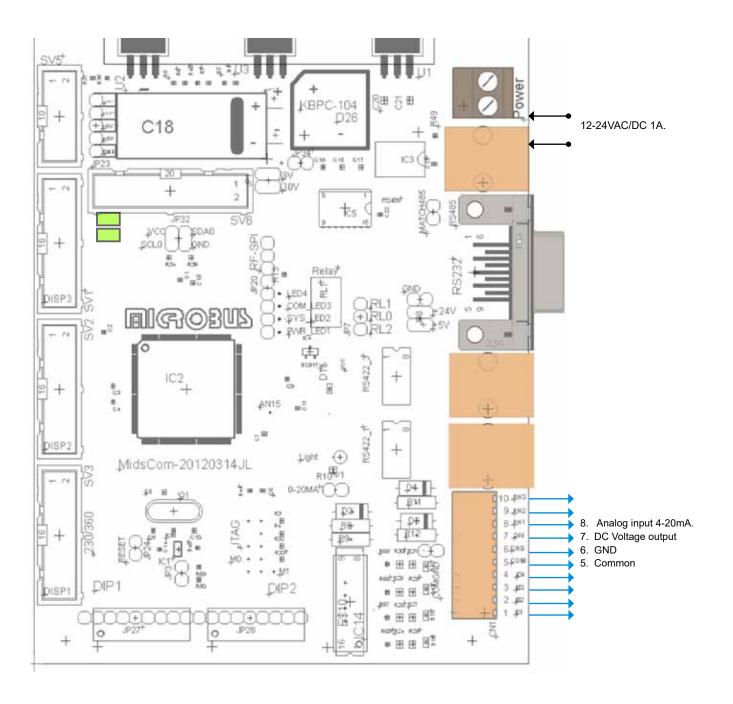
Contact Microbus for information or requests about additional customization or accessories.

Telephone +46 (0) 40 539680

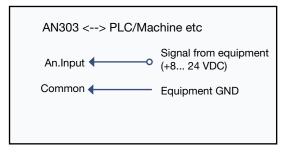
Please note that this manual covers the product series standard functionality. Factory customization, hardware or software made from customer request could override this manual.

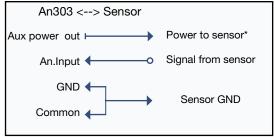


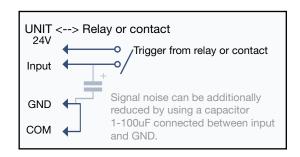
## MAINBOARD DIAGRAM



## CONNECTION SCHEMATICS



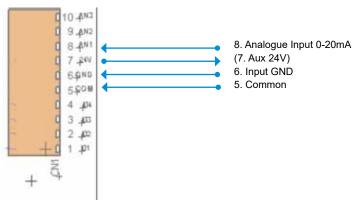




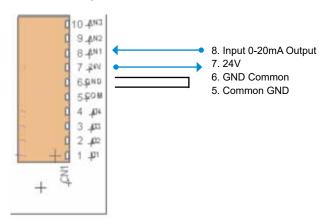
\*The Aux voltage from PCB is 24DC when unit is used with 24/30VAC PSU.

If 12VAC PSU is ed the resulting Aux Out will be less. ( $\sim$ 13VDC)

## Analogue input - Active sensor



## Analogue input - Passive sensor



# microstus .

## ArtNr: 100-050-81

2pcs preattached 3meter cables

4 pole cable:

Analog Input 4-20mA. Yellow DC Voltage OUT Brown Digital/Analogue GND Green Common White

2-pole cable for external power supply

White PSU GND
Brown PSU +24V ACDC

WIGOSUS ...

## ArtNr: 100-050-81-25

Preattached 0,5meter, 4 pole M12 male connector cable for both PSU and signal.

The connector uses following M12 pin configuration:



- 1. Brown: Analog Signal mA +
- 2. Blue: Analog GND
- 3. White: AC/DC IN +24V
- 4. Black: AC/DC IN 0V



## ArtNr: 100-050-81-16

Decals included: 0,1,3,4,5 2pcs preattached 3meter cables

4 pole cable:

Analog Input 4-20mA. Yellow DC Voltage OUT Brown Digital/Analogue GND Green Common White

2-pole cable for external power supply

White PSU GND
Brown PSU +24V ACDC



## ArtNr: 100-050-81-26

Decals included: 0,1,2,3,4,5

Preattached 0,5meter, 4 pole M12 male connector

cable for both PSU and signal.

The connector uses following M12 pin configuration:



- 1. Brown: Analog Signal mA +
- 2. Blue: Analog GND
- 3. White: AC/DC IN +24V
- 4. Black: AC/DC IN 0V

## CONFIGURATION



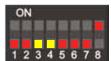
Configuration DIP-switches is located on the mainboard. A total of 16 switches divided over DIP1 and DIP2.

Most configuration pins will be read when pressing the restartbutton.

However the unit must be restarted to read all of the configuration.

DIP1 DIP1





Default settings for this model.
Customized settings are preconfigured from factory if customer requirements are known beforehand.
Red switches should not be changed

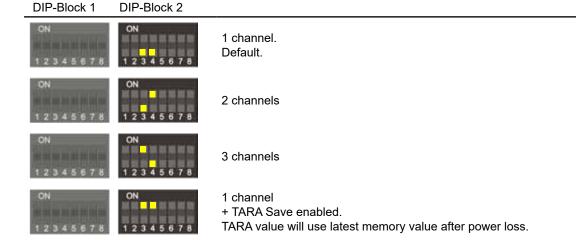
## Config: Average calculation / noise filter

# DIP-Block 1 DIP-Block 2 10 min. Slow response. Applicable for outdoor temperature sensors etc. 5 min 1 min 1 min 1 min 1 sec (Medium filter)

~0,4 sec (fast filter) Standard setting

Direct view, no filter

## Config: Number of channels. + TARA/OFFSET-memory



## **ACCESSORIES**

## **Outdoor sensor serie AGS54**

Closed allround outdoor sensor with external sensory.

To be mounted outdoor in the shadow, in freezing storages,

etc

MPS-AGS54-TRA1 Range: -50°C till +50°C MPS-AGS54-TRA2 Range: -10°C till +120°C MPS-AGS54-TRA3 Range: 0°C till +50°C MPS-AGS54-TRA4 Range: 0°C till +160°C MPS-KT-AF25-TRA5 Range: 0°C till +250°C



## Strap on sensors serie AF25

With heatplate for mount on pipes etc.

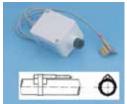
 MPS-AF25-TRA1
 Range: -50°C till +50°C

 MPS-AF25-TRA2
 Range: -10°C till +120°C

 MPS-AF25-TRA3
 Range: 0°C till +50°C

 MPS-AF25-TRA4
 Range: 0°C till +160°C

 MPS-AF25-TRA5
 Range: 0°C till +250°C





## Cablesensors serie TF25

For measurement of gases or fluids.

 MPS-TF25-TRA1
 Range: -50°C till +50°C

 MPS-TF25-TRA2
 Range: -10°C till +120°C

 MPS-TF25-TRA3
 Range: 0°C till +50°C

 MPS-TF25-TRA4
 Range: 0°C till +250°C

 MPS-TF25-TRA4
 Range: 0°C till +250°C



## Wireless etc

Other types of sensories are available on request.



## Decals and logos.

Please notify when ordering if special logos or decals is needed.

Logos & Decals

## Powersupply 24VAC <u>80-300-11</u>

Holes for easy mount on wall



## Slavedisplays

For connection as doublesided systems or for distance visualisations.



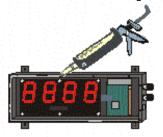
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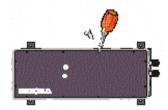


## WATERPROOFING ENCLOSURE

If the unit will be used outside or in any other rough environment the enclosure can be changed into IP65 by sealing the front cover glass with silicon or silicon free multiseal.

Sealing the front cover glass in not particularly hard but should be carefully so no leakage will occur. Please note that a unit that has leaked in causing water damage will only be covered by warranty if the sealing was made from factory.





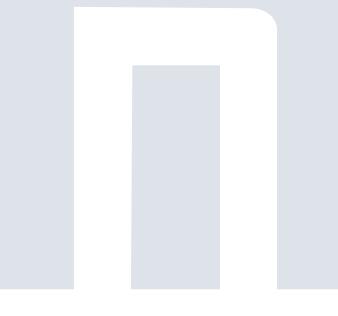


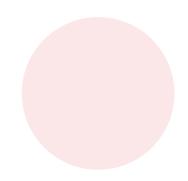
Before sealing the front cover glass please look over all connections, cables and configurations. Also check that all of the LED-diodes is standing straight. Make sure you have all screws and cover glass close by.

Place the display flat on a even surface with the cover glass off. Put a continous string of silicon on the edge of the displayfront.

When holding the cover make sure you have the gloss-side down and the frosty side up. Put the cover down as straight as possible.

Screw all screws gently. Some silicon will be spilled out from the display. This is easy to remove when the silicon has dried.





**Microbus Electronic Service AB Electronic signs since 1983** 

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